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Title: PEBBLE ROCKS BOULDER

Date: 2015-9-5

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The first night of the pebble hackathon comes to an end. Viget and pebble are hosing a great event with tons of food, free swag, and really smart people. Learning about the pebble smart strap interface proved to be interesting. This is my first hands on experience with the pebble watch, and I find it is a really good life style fit for me compared to my apple watch. Battery life, ux, and an always on screen are pretty huge in my book. Lack of touch screen was rough at first, but I do love not cleaning my watch face every 30 minutes. There is a ton of potential for cool accessories with the smart strap, so I am excited to see what the weekend yields.

After much laughter and discussion we have come up with the idea of building a hiking and survival accessory that takes advantage of the pebbles awesome battery life. As it currently stands our project will be built using the pebble smart strap port on the back of the watch and go to a arduino/lillypad/tinzy. There will be several small support features, but the core functionality will be sending an emergency destress signal via radio frequency. God willing all of this will fit into a paracord strap and not be to large... If everything goes wrong we will 3d print an arduino case and strap that to your wrist.

Our favorite idea that didn't make the cut was controlling a rumba with the accelerometer in your watch to chase yippy dogs around your living room. Next time...

At the end of the first day we have no code, an outline of tasks each person will tackle and two logo ideas...

Day two started out bright and early, we broke our project into three sections. Our pebble app section fell 80% in place by 1:30pm when we finally got around to breaking for lunch, but the Arduino and smartstrap sections of the app turned into a little bit less speedy. Our app uses the GPS from the phone (pebblejs), pebble smartstrap(c), and a serial connection to the Arduono. It took quite a bit of time to get on the latest Pebble version and release candidate which contains all the goodies to use the smart strap, because of this we worked mostly off CloudPebble, and tested on the one device. CloudPebble works pretty smoothly, but the overhead of switching pebble versions, and release candidates was a bit much. The developer environment we used for testing and most of the major development not only crashed, it caused the whole machine to lock up.

We overcome a large portion of these challenges and are ending the night with a smartwatch on a paracord strap with a firestarter buckle. We have the hardware built for both our testing(Arduino) and production-ish(Teensy) environments. We are sending data from the watch to a computer completely free of cell phone service. We are getting GPS data from the phone, but struggling to get it all the way to the watch to send out in our UHF stream to satellites. We have several marketing/video type things built to help our presentation and explanation along.

Day two impressions: I still like pebble watch, but I am now realizing the constant pinging of the phone to location services is doing a number on my phone battery. Tomorrow I will try a static location. The pebble SDK is a bit rough around the edges since you can't write in C or JS, you will probably need to switch between. Mike has been dealing with a lot of the difficulties there, and it looks like quite a nightmare. The team of Scott Owen, [Eric Starling](http://ericstarling.com/), and Mike Cassano are really doing a great job with the real work as I draw pretty pictures, write on post-its, and beat all the Tetris records on Mikes RetroPie.

Recap:

Pebble Rocks Boulder has come to an end, the final day started with an some awesome dev work by Mike Cassano to finish up the couple outstanding code problems, and Eric Starling finishing up the presentation. The final bit of work turned out to be less stressful then expected, since most of our stretch goals we just dropped at the very beginning.

We had an awesome time talking to all the other teams about their [projects](https://www.hackster.io/hackathons/pebble-rocks-boulder/a-pebble-hackathon/projects). As always it was tons of fun to speak to the judges and other teams about our [project](https://www.hackster.io/team-universal-mind/survival-strap). In the end we received the award for "most popular" and "most technically impressive."

All in all, it was a great event by Viget, Pebble, and Galvanize. I look forward to the next one!